

What is claimed is:

1. A LAN communication method, wherein:

in a transmitting side system, when sending out data packets representing data as the subject of transmission, multiplexed CODEC data packets each including a data packet representing data in one time section and a correction code representing a correction code of a predetermined data packet in a time section retroactive to the afore-said time section by a time interval corresponding to a predetermined frame number are formed and sent out; and

in a transmitting side system, the multiplexed CODEC data packets are received as a data packet group and, when data packet discarding has occurred, the data as the subject of transmission is reconstructed on the basis of a correction code in the pertinent CODEC data packet without waiting re-transmission of any CODEC data packet.

2. A LAN communication method, wherein in a transmitting side system, when sending out data packets representing data as the subject of transmission to a corresponding receiving side system via wireless LAN, multiplexed CODEC data packets each including a data packet representing data in one time section and a correction code representing data of a predetermined data packet in a time section retroactive to the afore-said one time section by a time interval corresponding to a predetermined frame number are formed and sent out.

3. A LAN communication method, wherein in a receiving side system multiplexed CODEC data packets, which are formed in the corresponding transmitting side system and each include a data packet representing data in one time section and a correction code representing a predetermined data packet in a time section retroactive to the afore-said one time section by a time interval corresponding to a predetermined frame number, are received as a data packet group and, when data packet discarding has occurred, data as the subject of transmission is reconstituted based on the correction code in the CODEC data packet without waiting re-transmission of any CODEC data packet.

4. A LAN communication system comprising:

a transmitting side system, in which when sending out data packets representing data as the subject of transmission to LAN, multiplexed CODEC data packets each including a data packet representing data of one time section and a correction code representing data of a predetermined data packet in a time section retroactive to the afore-said one time section by a time interval corresponding to a time interval corresponding to a frame number are formed and sent out; and

a receiving side system, in which in the event of data packet discarding has occurred when the multiplexed CODEC data packets are received as a data packet group, data as the subject of transmission is reconstructed on the basis of a correction code in the pertinent CODEC data

packet without waiting re-transmission of any CODEC data packet.

5. A LAN communication system comprising a transmitting side system, which is arranged such that when sending out data packets representing data for transmission to a corresponding receiving side system to LAN, multiplexed CODEC data packets each including a data packet representing data in one time section and a correction code representing data of a predetermined data packet in a time section retroactive to the aforesaid one time section by a time interval corresponding to a predetermined frame number are formed and sent out.

6. A LAN communication system comprising a receiving side system, wherein multiplexed CODEC data packets, which are formed in a corresponding transmitting side system and each include a data packet representing data in one time section and a correction code representing data of a predetermined data packet in a time section retroactive to the afore-said one time section by a time interval corresponding to a predetermined data frame number, are received as a data packet group and, when data packet discarding has occurred, data as the subject of transmission is reconstructed on the basis of the correction code in the pertinent CODEC data packet without waiting re-transmission of any CODEC data packet.

7. A LAN communication system comprising:

- a transmitting side system including:
 - a voice signal input part for inputting data to be sent out to LAN;
 - a transmitting side CODEC part for converting signal representing the data inputted from the voice signal input part to digital codes;
 - a transmission buffer part including a data buffer part for temporarily storing CODEC data packets of the digital codes generated in the transmitting side CODEC part until the CODEC data packet is sent out to the LAN and a plural CODEC data multiplexing part for multiplexing a predetermined plurality of CODEC data packets to form transmission data; and
 - a transmitting part for receiving the multiplexed transmission data from the transmission buffer and sending out the received transmission data to LAN; and
- a receiving side system including:
 - a receiving part for receiving the transmission data from the LAN;
 - a reception buffer part including a plural CODEC packet decoding part for developing the multiplexed transmission data received in the receiving part and rearranging the developed data to a continuous data train and a jitter data buffer part for temporarily storing data from the plural CODEC packet decoding part;
 - a receiving side CODEC part for receiving and decoding the digital data from the reception buffer part; and

an output part for reconstructing and outputting data reconstructed in the receiving side CODEC part.

8. A LAN communication system comprising a transmitting side system including:

an input part for inputting signal representing data to be sent out to LAN;

a transmitting side CODEC part for converting the signal representing data inputted from the input part to digital codes;

a transmission buffer part including a data buffer part for temporarily storing CODEC data packets of digital codes generated in the transmitting side CODEC part until the CODEC data packets are sent out to the LAN, and a plural CODEC data multiplexing part for multiplexing a predetermined plurality of CODEC data packets to form transmission data; and

a transmitting part for receiving the multiplexed transmission data from the transmission buffer part and sending out the received transmission data to the LAN.

9. A LAN communication system including a receiving side system including:

a receiving part for receiving transmission data from corresponding LAN;

a reception buffer part including a plural CODEC packet decoding part for developing transmission data of multiplexed a predetermined plurality of CODEC data packets

which is received in the reception part, and rearranging the developed transmission data, rearranging the sequence order of the data packets and rearranging the data packets to a continuous data train, and a jitter data buffer part for temporarily storing data from the plural CODEC packet decoding part;

a receiving side CODEC part for receiving and decoding digital jitter from the reception buffer part; and

an output part for reconstructing and outputting data obtained by decoding in the receiving side decoding part.

10. A LAN communication system according to claim 7, which further comprises a simultaneous transmission packet number setting part for setting the number of CODEC data packets to be multiplexed in the plurality of CODEC multiplexing part in the transmitting side system.

11. The LAN communication system according to claim 8, which further comprises a simultaneous transmission packet setting part for setting the number of CODEC data packets to be multiplexed in the plural CODEC data multiplexing part.

12. The LAN communication system according to claim 10, wherein the receiving side system further includes a CODEC packet non-arrival factor computing part for computing the non-arrival factor of CODEC data packet number as a ratio of the number of data packets processed as data

non-arrival concerning CODEC data obtained by sequentially arranging in the reception buffer part to the full transmitted data packet number and informing a simultaneous transmission packet number change request to the simultaneous transmission packet number setting part in the transmitting side system on the basis of the comparison of the computed non-arrival factor and a predetermined reference value.

13. A LAN communication system comprising:

a transmitting side system including:

an input part for inputting data to be sent out to LAN;

a transmitting side CODEC part for converting signal representing data inputted from the input part to digital signal;

a transmission buffer part including a data buffer part temporarily storing CODEC data packets of digital codes generated in the transmitting side CODEC part and a plural CODEC data multiplexing part for multiplexing a predetermined plurality of CODEC data packets to form transmission data;

a simultaneous transmission packet number setting part for setting the number of CODEC data packets to be multiplexed in the plural CODEC data multiplexing part in response to a request command from a receiving side system corresponding to the transmitting side system; and

a transmitting part for receiving multiplexed

transmission data from the transmission buffer part to send to the LAN; and

the receiving side system including:

a receiving part for receiving transmission data from the LAN;

a reception buffer part having a plural CODEC packet decoding part for developing the multiplexed transmission data received from the receiving part, rearranging the sequential order of the developed data packets and rearranging the data packets to form a continuous data train, and a jitter data buffer part for temporarily storing data from the plural CODEC packet decoding part;

a simultaneous reception packet number setting part for setting a number of packets to be dealt with in the plural CODEC packet decoding part as belonging to the same time frame and being received simultaneously, recognizing the number of CODEC data packets to be multiplexed, as set in the simultaneous transmission packet number setting part in the transmitting side system, on the basis of the data received in the receiving part, recognizing the number of CODEC data packets, which are among a plurality of multiplexedly transmitted CODEC data packets and, belong to the same time frame and are actually simultaneously received, on the basis of the data received in the receiving part and, when the degree of failure of meeting of the transmitted CODEC data packet number by the actually received CODEC data packets, issuing a command for reducing the number of CODEC data packets to be multiplexed as a

request command to be issued to the simultaneous transmission packet setting part on the transmitting side;
a receiving side CODEC part for receiving and decoding digital data from the reception buffer part; and
an output part for reconstructing and outputting data obtained by decoding in the receiving side CODEC part.

14. A LAN communication system comprising:

a transmitting side system including:

an input part for inputting data to be sent out to LAN:

a transmitting side CODEC part for converting signal representing data inputted from the input part to digital signal to form CODEC data and performing conversion to packets in predetermined time intervals;

a transmitting side CODEC packet conversion timing setting part for setting the time interval of packet conversion of CODEC data in the transmitting side CODEC part in response to a request for setting from a receiving side system corresponding to the transmitting side system;

a transmission buffer part including a data buffer part for temporarily storing CODEC data packet of digital codes generated in the transmitting side CODEC part and a plural CODEC data multiplexing part for multiplexing a predetermined plurality of CODEC data packets to form transmission data;

a simultaneous transmission packet number setting part for setting the number of CODEC data packets to be

multiplexed in the plural CODEC data multiplexing part in response to a request command from the receiving side system corresponding to the transmitting side system; and

a transmitting part for receiving the multiplexed transmission data from the transmission buffer part and sending out the received data to the LAN; and

the receiving side system comprising:

a receiving part for receiving multiplexed transmission data from the LAN;

a reception buffer part including a plural CODEC packet decoding part for developing the multiplexed transmission data received in the receiving part, arranging the obtained data packets in sequence order and rearranging these data packets to form a continuous data train, and a jitter data buffer part for temporarily storing data from the plural CODEC packet decoding part;

a simultaneous reception packet number setting part for setting the number of data packets to be dealt with in the plural CODEC packet decoding part as data packets belonging to the same time frame and received simultaneously;

a CODEC packet non-arrival factor computing part for computing the non-arrival factor of CODEC data packet number as the ratio of the number of data packets processed as data non-arrival regarding CODEC data obtained by sequential rearranging in the reception buffer part to the total transmitted data packet number, informing, when the non-arrival factor exceeds a predetermined reference value,

a request for increasing the simultaneous transmission packet number to the simultaneous transmission number setting part in the transmitting side system, and issuing a packet conversion timing time interval setting request for causing the transmitting side CODEC part to set the CODEC data packet conversion time interval according to the non-arrival factor;

a receiving side CODEC packet conversion timing setting part for issuing, when receiving the packet conversion timing time interval setting request from the CODEC packet non-arrival factor computing part, the setting request to the transmitting side CODEC packet conversion timing setting part;

a receiving side CODEC part for receiving and decoding digital data from the reception buffer part; and

an output part for reconstructing and outputting the data obtained by decoding in the receiving side CODEC part.

15. A LAN communication system according to claim 14, wherein the CODEC packet non-arrival factor computing part has an arrangement having a table, which prescribes packet conversion time intervals of applied CODEC data determined based on the non-arrival factor and issuing packet timing time interval setting request according to the table data.

16. The LAN communication system according to claim 14, wherein when the transmitting side CODEC packet

conversation timing setting part sets the CODEC data packet conversion time interval in response to a setting request from the receiving side system corresponding to the transmitting side system, it sends out a time setting request reception success information to the receiving side at the success time.

17. The LAN communication system according to claim 14, which further comprises a preliminary data re-compressing part for supplying data obtained by a re-compressing process with a compression factor corresponding to the pertinent data to the plural CODEC data multiplexing part in the transmission buffer part on the basis of a table, in which compression factor to be applied are stored in correspondence to sequence systems of a plurality of CODED data packets, and a preliminary data re-compression decoding part for executing a re-compression decoding process corresponding to the recompression process in the preliminary data re-compressing part on data processed in the plural CODEC data packet decoding part in the reception buffer part.